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American University Technical Reports, Bureau of Mines, War Gas Investigations (WGI) Monographs

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DEPARTMENT OF THE ARMY
US ARMY RESEARCH, DEVELOPMENT AND ENGINEERING COMMAND
EDGEWOOD CHEMICAL BIOLOGICAL CENTER
5183 BLACKHAWK ROAD
ABERDEEN PROVING GROUND, MD 21010-5424

REPLY TO
ATTENTION OF:

APR 14 2015

RDCB-DPS-RS

MEMORANDUM THRU Director, Edgewood Chemical Biological Center (ECBC), (RDCB-D, Mr. Joseph L. Corriveau), 5183 Blackhawk Road, Aberdeen Proving Ground, MD 21010-5424

FOR Office of the Chief Counsel, US Army Research, Development and Engineering Command (RDECOM), (AMSRD-CCF/Ms. Kelly Knapp), 3071 Aberdeen Boulevard, Aberdeen Proving Ground, MD 21005-5424

SUBJECT: Operations Security/Freedom of Information Act (FOIA) Review Request

1. The purpose of this memorandum is to recommend the release of information in regard to request to RDECOM FOIA Requests FA-14-0054.

2. ECBC received the request from Ms. Kelly Knapp, the RDECOM FOIA Officer. The request originated from [redacted].

3. The following documents were reviewed by Subject Matter Experts within ECBC:

a. History of Research at Yale University, dated 20 Nov 1918, 11 pages.

b. Bancroft's History of the Chemical Warfare Service in the United States, by Lt. William Bancroft; AD-495049; dated 31 May 1919, 206 pages.

c. A Historical Sketch of Edgewood Arsenal, by Lt. William McPherson; AD 498494; date unknown, 20 pages.

d. The Diary of Jet Parker; C390D1; dated Sep - Dec 1918, 26 pages.

e. American University Technical Reports, Bureau of Mines, War Gas Investigations (WGI) Monographs, date unknown.

4. ECBC has determined that all of the reviewed documents are suitable for release, however, all documents must have the classification/distribution changed through the Defense Technical Information Center prior to any release.

5. The point of contact is Mr. Ronald L. Stafford, ECBC Security Manager, (410) 436-1999 or ronald.l.stafford.civ@mail.mil.

RONALD L. STAFFORD
Security Manager

AMERICAN UNIVERSITY TECHNICAL REPORTS

BUREAU OF MINES
WAR GAS INVESTIGATIONS (WGI) MONOGRAPHS
(OLD SERIES):

WGI 1: Dicholoroethyl Sulfide (Mustard) and Homologues, Clarence J. West, Part I (revised), 1 Aug 1918 and Part II (revised), 30 Aug 1918

WGI 4: Phosgene, Clarence J. West, 24 May 1918

WGI 6: Silicon Tetrachloride, Austin M. Patterson and Clarence J. West, 22 June 1918

WGI 7: Titanium Tetrachloride, Austin M. Patterson and Clarence J. West, 25 Jun 1918

WGI 8: Tin Tetrachloride, Austin M. Patterson and Clarence J. West, 26 Jun 1918

WGI 9: Soda Lime Granules, Stuart J. Lloyd and Clarence J. West, 6 Jul 1918

CHEMICAL WARFARE MONOGRAPHS (CWM):

CWM 1: Theoretical Considerations on Canister Filling, Clarence J. West, Mar 1918

CWM 2: Testing of Gas Masks (Part I) and Absorbent Testing (Part II), Clarence J. West, Mar 1919

CWM 3: Testing of Gas Masks (Part II), Canister Testing, Clarence J. West, Mar 1919

CWM 4: Testing of Gas Masks (Part III), Intermittent Canister Testing Man House (Gas Chamber) Laboratory, Clarence J. West, Mar 1919

CWM 5: Testing of Gas Masks (Part IV), Methods of Testing Filters and Canisters Against Smoke, Clarence J. West, Mar 1919 [2 copies]

CWM 6: Testing of Gas Masks (Part V), Testing of Face Pieces, Clarence J. West, Mar 1919 [2 copies]

CWM 7: Testing of Gas Masks (Part VI), Methods of Analysis, Clarence J. West, March 1919

CWM 8: Factors Influencing the Efficiency of Absorbents, Clarence J. West, Apr 1919

CWM 9: Factors Influencing the Efficiency of Canisters, Clarence J. West, Mar 1919

CWM 10: Fluorine and its Derivatives, Austin M. Patterson and Clarence J. West, 3 Aug 1918

CWM 12: Screening Smokes, Stewart J. Lloyd and Clarence J. West, 25 Oct 1918 [old series]

CWM 12: Smoke Filters, Clarence J. West, Jun 1919

CWM 15: Lachrymators, Part V, Halogenated Esters, Clarence J. West, 30 Oct 1918

CWM 15: Lachrymators, Part VI, Aromatic Halides, Clarence J. West, Nov 1918

CWM 15: Lachrymators, Part VIII, Miscellaneous, Clarence J. West [2 copies]

CWM 15: Analytical Methods, Chloropicrin - Mustard Gas, L. L. Satler and Clarence J. West, Apr 1919 [new series]

CWM 16: Analytical Methods, Part II, Arsenic Derivatives, Miscellaneous Organic Analysis, L. T. Satler and Clarence J. West, Apr 1919

CWM 17: Organic Arsenic Derivatives, Part I, Pages 1-200, Clarence J. West, 25 Nov 1918 [old series]

CWM 17: Supplement, Bibliography of Arsenic Compounds, Helen B. Goodhue, 25 Nov 1918 [old series]

CWM 17: Analytical Methods, Part III, Clarence J. West, Apr 1919 [2 copies]

CWM 18: Lachrymators, Part VIII, Miscellaneous, Clarence J. West [same as CWM 15, Part VIII]

CWM 19: Chloropicrin, Part I, Clarence J. West, May 1919 [2 copies]

CWM 19: Chloropicrin, Part II, Clarence J. West, May 1919

CWM 20: Inorganic Arsenic Derivatives, Part I, Arsine, Clarence J. West, May 1919

CWM 20: Inorganic Arsenic Derivatives, Part 2, Arsenides, Halides, Oxide, Clarence J. West, May 1919

CWM 21: Organic Arsine Derivatives, Part I, Aliphatic Compounds, Clarence J. West, Apr 1919 [2 copies]

CWM 21: Organic Arsenic Derivatives, Part II, Aromatic Compounds, Clarence J. West, Apr 1919 [2 copies]

CWM 21: Organic Arsenic Derivatives, Part IV, Diphenylchloroarsine, Clarence J. West, Apr 1919 [marked Part II, 2 copies]

CWM 21: Organic Arsenic Derivatives, Part V, DM and Related Compounds, Clarence J. West, Apr 1919 [2 copies]

CWM 22: Phosgene, Part I, Clarence J. West, May 1919

CWM 22: Phosgene, Part II, Clarence J. West, Jun 1919

CWM 22: Phosgene, Part III, Clarence J. West, Jun 1919

CWM 23: Cyanogen and Hydrocyanic Acid, Clarence J. West, May 1919

CWM 24: Cyanogen Derivatives, Chloride, Bromide, Iodide Sulfide, Part I, Clarence J. West, Apr 1919

CWM 24: Cyanogen Derivatives, Chloride, Bromide, Iodide Sulfide, Part II, Clarence J. West, Apr 1919 [2 copies]

CWM 25: Superpalite and Intermediates, Clarence J. West, Mar 1919 [2 copies]

CWM 26: Fluorine and Derivatives, Clarence J. West and Austin M. Patterson, Apr 1919 [3 copies]

CWM 27: Tetrachlorides, Silicon, Tin, Titanium, Part I, Austin M. Patterson and Clarence J. West, May 1919 [2 copies]

CWM 27: Tetrachlorides, Silicon, Tin, Titanium, Part II, Austin M. Patterson and Clarence J. West, May 1919 [2 copies]

CWM 28: Bromobenzyl Cyanide, Clarence J. West, May 1919 [2 copies]

CWM 29: Acrolein, Clarence J. West, May 1919

CWM 30: Halogenated Ketones (Bromoacetone) and Esters, Clarence J. West, May 1919

Part I

CWM 31: Aromatic Halides (Benzyl and Xylyl), Clarence J. West, May 1919

CWM 32: Chloroacetophenone, Part II, Clarence J. West, May 1919

CWM 33: Lachrymators and Miscellaneous (same as CWM 15, Part VIII), Clarence J. West

CWM 36: Camouflage Gases (Butyl Mercaptan, etc), Clarence J. West, May 1919 [2 copies]

CWM 37: Ricin, Reid Hunt, Worth Hale, J. M. Looney, C.C. Lund, R.R. Williams, 30 Sep 1918

CWM 38: Protective Clothing, Part I, Arthur E. Hill, May 1919 [2 copies]

CWM 38: Protective Clothing, Part II, Arthur E. Hill, June 1919

CWM 39: Protective Ointments, Part I, W. Lee Lewis, May 1919 [2 copies]

CWM 39: Protective Ointments, Part II, W. Lee Lewis, May 1919 [2 copies]

CWM 41: Signal Smokes, Part II, Arthur B. Ray, May 1919

CWM 42: Toxic Smokes, Part I, Clarence J. West, May 1919 [2 copies]

CWM 42: Toxic Smokes, Part II, Clarence J. West, May 1919

CWM 42: Toxic Smokes, Part III, Clarence J. West, May 1919 [2 copies]

CWM 43: Incendiaries, Part II (Pt 1), pp. 1- 187, Arthur B. Ray, May 1919 [2 copies, 1 w/o table of contents]

CWM 43: Incendiaries, Part II (Pt 2), pp. 170-318, Arthur B. Ray, Jun 1919 [2 copies]

CWM 43: Incendiaries, Part III (Pt 1), Arthur B. Ray, May 1919 [3 copies, 1 w/o table of contents]

CWM 43: Incendiaries, Part III (Pt 2), Arthur B. Ray, May 1919

CWM 44: Flares, Part I (Chaps 1-2), W. Lee Lewis and Arthur B. Ray, Jun 1919 [2 copies]

CWM 44: Flares, Part I (Pt 2), W. Lee Lewis and Arthur B. Ray, Jun 1919

CWM 44: Flares, Part II (Chaps 3-5), Arthur B. Ray, Jun 1919 [2 copies]

CWM 44: Flares, Part III (Chap 6, Pt 1), Arthur B. Ray, Jun 1919 [3 copies]

CWM 46: Properties of Canister Charcoal, Part II, Austin M. Patterson, Jun 1919

CWM 47: Impregnated Charcoals, Part 2, Austin M. Patterson, Jun 1919

CWM 48: Standard Methods for the Testing of Absorbents for Carbon Monoxide, A.T. Larson, A.R. Jayson and E.C. White, May 1919

CWM 52: Screening Smokes, Stewart J. Lloyd and Clarence J. West, 25 Oct 1918

CHEMICAL DEVELOPMENT SECTION AND MECHANICAL RESEARCH DEVELOPMENT SECTION (CDS/MRDS):

CDS/MRDS: Summary of Achievements, 1917-1918, Chemical Development Section, W. K. Lewis, and Mechanical Research and Development Section, B.B. Fogler [4 copies, also designated CWM 54]

SMALL SCALE MANUFACTURING SECTION, CATALYTIC SECTION, EDITORIAL SECTION, OFFENSE CHEMICAL RESEARCH SECTION (SSMS/CS/ES/OCRS):

SSMS/CS/ES/OCRS: Summary of Achievements, 1917-1918, Small Scale Manufacturing Section, Catalytic Section, Editorial Section, Offense Chemical Research Section [also designated CWM 55]

MECHANICAL RESEARCH SECTION (MRS):

MRS 1: Mechanical Research Section, Reports 1-11 (21 Sep 17-15 Feb 18), H.H. Clark (mask and canister work)

MRS 2: Mechanical Research Section, Reports 12-17, H.H. Clark (mask and canister work)[includes Specs for the American Tissot]

MRS 3: Mechanical Research Section, Reports 18-28, H.H. Clark (mask and canister work)

MECHANICAL RESEARCH AND DEVELOPMENT SECTION (MRD):

MRD 1: Gas Masks (Reports 1-13)

MRD 2: Canisters (Reports 14-27)

DEFENSE CHEMICAL RESEARCH SECTION (DR):

DR 1: Eyepiece Unit Reports, Part I (Reports 1-19), Arthur B. Lamb

DR 8: Efficiency of Absorbents (Reports 121-135), Arthur B. Lamb

DR 9: Arsine (Reports 136-145), Arthur B. Lamb

DR 10: Charcoal, Part I (Reports 146-164)

DR 10: Charcoal, Part II (Reports 165-179), Arthur B. Lamb

DR 12: Cloud Gases (Reports 197-203), Arthur B. Lamb

DR 13: Protective Ointments (Reports 204-211), Arthur B. Lamb [decon]

DR 14: Mustard Gas, Part I (Reports 212-232), Arthur B. Lamb [detectors]

DR 14: Mustard Gas, Part II (Reports 233-239), Arthur B. Lamb

DR 15: Soda Lime and Permanganate in General, Part I (Reports 240-259), Arthur B. Lamb

DR 15: Soda Lime and Permanganate in General, Part II (Reports 260-273), Arthur B. Lamb

DR 15: Soda Lime and Permanganate in General, Part III (Reports 274-283), Arthur B. Lamb

DR 16: Smokes, Part I (Reports 284-311)[filters]

DR 17: Electrolytic Production of Permanganates, Part II (Reports 342-344), Arthur B. Lamb

DR 18: Carbon Monoxide, Part I, Pt 1 (Reports 345-369)

DR 18: Carbon Monoxide, Part II, Pt 1 (Reports 389-398)

DR 19: Miscellaneous Reports (Reports 413-438), Arthur B. Lamb

GAS MASK RESEARCH SECTION (GMR) :

GMR 1:Reports 1-25, A.C. Fieldner, to Oct 1, 1917

GMR 3: Reports 58-116, A.C. Fieldner, Nov 1917

GMR 5: Reports 154-207, A.C. Fieldner, Jan 1918

GMR 6: Reports 208-268, A.C. Fieldner, Feb 1918

GMR 7: Reports 269-307, A.C. Fieldner, March 1918

GMR 8: Reports 308-315, Part I, A.C. Fieldner, April 1918

GMR 8: Reports 316-341, Part II, A.C. Fieldner, April 1918

GMR 9: Reports 373-396, Part II, A.C. Fieldner, May 1918

GMR 10: Reports 397-422, Part I, A.C. Fieldner, June 1918

GMR 10: Reports 423-436, Part II, A.C. Fieldner, June 1918

GMR 10: Reports 437-460, Part III, A.C. Fieldner, June 1918

GMR 11: Reports 497-515, Part I-B, A.C. Fieldner, July 1918

GMR 11: Reports 516-543, Part II, A.C. Fieldner, July 1918

GMR 12: Reports 544-569, Part I, A.C. Fieldner, Aug 1918

GMR 12: Reports 570-594, Part II, A.C. Fieldner, Aug 1918

GMR 13: Reports 595-617, Part I, A.C. Fieldner, Sept 1918

GMR 14: Reports 638-655, Part I, A.C. Fieldner, Oct 1918

GMR 14: Reports 656-675, Part II, A.C. Fieldner, Oct 1918

GMR 15: Reports 699-723, Part I, A.C. Fieldner, Nov 1918

GMR 15: Reports 724-743, Part II, A.C. Fieldner, Nov 1918

GMR 16: Reports 783-800, Part II, A.C. Fieldner, Dec 1918 & Jan 1919

GMR 16: Reports 814-827, Part IV, A.C. Fieldner, Dec 1918 & Jan 1919

GMR 16: Reports 828-844, Part V, A.C. Fieldner, Dec 1918 & Jan 1919

GMR 17: Index and Table of Contents for Volume I to XVII, compiled by Sgts. Scull, Longfellow, and Warren

GMR 20: Summary of Achievements 1917-1918, A.C. Fieldner [2 copies]

PHARMACOLOGICAL AND RESEARCH SECTION (PR) :

PR 1: Reports 1-50, E.K. Marshall

PR 3: Reports 101-150, E.K. Marshall

PR 4: Reports 151-200, E.K. Marshall

PR 5: Reports 201-250, E.K. Marshall

PR 6: Reports 251-300, E.K. Marshall

PR 7: Reports 301-336, E.K. Marshall

CHEMICAL DEVELOPMENTS SECTION (CD) :

CD 1: Reports 1-33

CD: The Industrial Gas Mask, Knowland and Wilkins, December 1, 1918

CHEMICAL PRODUCTION SECTION (CP) :

CP 1: Reports 1-19, W.S. Rowland

CP 2: Reports 20-39, W.S. Rowland

CP 3: Reports 40-54, W.S. Rowland

CP 4: Reports 55-68, W.S. Rowland

CP 5: Reports 69 (pp. 1-128), W.S. Rowland

PHARMACOLOGICAL AND TOXICOLOGICAL SECTION (PT) :

PT 4: Reports A-201 – A-250, A.S. Loevenhart

PT 8: Reports 351-402, A.S. Loevenhart

OFFENSE CHEMICAL RESEARCH SECTION (OR):

OR 1: Arsenic Derivatives, Part I, (Reports 1-62)

OR 1: Arsenic Derivatives, Part II, (Reports 63-87)

OR 2: Chloroacetophenone, (Reports 90-137)

OR 5: Cyanogen Chloride, Lachrymators, (Reports 192-256), Yale Laboratory

Cyanogen Chloride

Lachrymators

Organic Preparations by Yale Laboratory

OR 6: Miscellaneous Reports, Part II, (Reports 300-345)

OR 7: Superpalite, Chloropicrin, Butyl Mercaptan and Acrolein, (Reports 346-390)

Superpalite

Chloropicrin

OR 8: Mustard Gas, Part I, (Reports 391-432)

OR 8: Mustard Gas, Part II, (Reports 433-475), [2 copies]

OR 8: Mustard Gas, Part III, (Reports 476-500), (originally Vol. I, Part II)

OR 9: Incendiaries (Reports 501-526)

CATALYTIC SECTION (CS):

CS 1: Reports 1-13, Part I, W.D. Bancroft

CS 2: Reports 14-25, Part II, W.D. Bancroft

DISPERSOID SECTION (DS):

DS 2: Reports 51-76, R.C. Tolman

DS 3: Reports 77-100, R.C. Tolman

DS 4: Reports 101-120, R.C. Tolman

DS 5: Reports 121-150, R.C. Tolman

COORDINATING COMMITTEE ON ANALYTICAL AND RESEARCH METHODS (CCARM):

CCARM: Methods of Testing Absorbents, Part I

General Analytical Methods
1. Introduction
2. General Considerations Relating to the Accuracy of Tube Tests
3. Specifications for Sample Tubes
4. Determination of Area of Absorption Tubes
5. Calibration of Flow-meters and Adjustment of Sample Tube to Atmospheric Pressure
6. Preparation of Sample for Test
7. Method of Filling Sample Tube
8. Additional General Requirements
9. Miscellaneous

Standard Tube Test with Chlorine
Standard Long G25 Method
Accelerated G25 Method
Accelerated G25 Method, First Revision
Standard G52 Method
G49 Tube Test
Standard G-43 Method
Standard Tube Tests with G-7
Standard G-178 Tube Test

CCARM: Methods of Testing Absorbents, Part II

Standard SO_2 Tube Test
Standard Method for Screen Analysis
Discussion of Hardness Testing with Provisional Method
Standard Detonation Method for Man-House Tests on Filters with G-76 (Including Analytical Methods for G-76 in Air)
Proposed Standard Tube Tests on 12-24 Mesh Material
Standard Method of Measuring the Pressure Drop through Smoke Filtering Materials
Standard Flange Tests for Smoke Filter with F-10
Supplementary Notes on Standard Flange Test for Smoke Filters with F-10
Standard Flange and Canister Tests of Smoke Filters against Tobacco Smoke

CCARM : Minutes of Conferences

MISCELLANEOUS REPORTS (MR):

MR : Minutes, Carbon Monoxide Conference

MR: Official Methods for the determination of Arsine, Methyldichloroarsine, Ethyldichloroarsine, and Diphenylchloroarsine, Committee on Analytical Methods, Washington, DC, 1918

MR: Summary Report on Felt for Smoke Filters, John B. Dickson

MR : Work of Research Division on Problems under Investigation, Technical Division, A.E.F., Report V-1 through V-16

MR : Presentation of the Goodrich-Lakeside Mask and a Study of the Principles Involved in Mask Design, Major R.G. Pearce and W.C. Geer Ph.D, Editorial Section, Vol. 59, Oct 24 1918

MR: Flaming liquids